DOCUMENT RESUME

ED 086 273 JC 740 027

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TITLE An Accountability Technique in Higher Education: The Role of Planning, Programming, Budgeting and Evaluation System (PPBES).
PUB DATE [74]
NOTE 23p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *College Administration; *Community Colleges; Decision Making; *Educational Accountability; Governance; *Higher Education; *Management Information Systems; Post Secondary Education; Systems Approach; Technical Reports
IDENTIFIERS *Florida

ABSTRACT

In response to the demand for accountability in higher education, colleges have adopted business techniques of planning and management systems in the form of Planning, Programming, Budgeting, and Evaluation System (PPBES). The system approach to educational administration consists of three interrelated concepts: (1) input, (2) process, and (3) output. A PPB System has three basic capabilities: (1) an analytic capability for carrying out continuing in-depth analysis of the college's objectives and its various programs for meeting the objectives; (2) a multi-year planning and programming process, which utilizes a computer-based management information system for providing data useful for management decision making; and (3) a budgeting process that translates program decisions into a financial plan in a budget form. PPBS was selected for implementing long-range planning in Florida, as it places emphasis on all educational functions and activities and on sharing common objectives. Three community colleges in Florida were selected as pilot centers and began an effort to implement PPBS. Their progress varies in relation to meeting a 1975-1976 deadline. The Florida plan for accountability via PPBES has considerable merit for attaining participatory college governance by every level of the college structure. It is envisioned as a participatory system in which every member of the college community will have some input as to the way the college is governed. (For related documents, see JC 740 024-026.) (DB)

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ED 086273

AN ACCOUNTABILITY TECHNIQUE IN HIGHER EDUCATION:

THE ROLE OF PLANNING, PROGRAMMING, BUDGETING AND EVALUATION SYSTEM

(PPBES)

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Introduction

College and university administrators have been noted for responding to funding plans rather than planning the needs of their institutions. The rapid growth during the last decade has made comprehensive and integrated planning difficult. The major objective was how to meet the educational needs of an increasing number of students. Funding these educational programs in the past was not a major concern of the academic manager. However, in the last few years the availability of state, federal and private funds has been greatly reduced, presenting college administrators with a problem of demonstrating to the public the effectiveness and efficiency of their organizations. In response to a new wave for accountability in higher education, a need arises to establish outcome orientated management planning systems.

The demand for accountability has pressed college administrators to seek methods which would permit them to institute long-range planning and allocate the resources into areas which will yield the best results for the institution. In response to this demand, colleges have adopted "business techniques" of planning and management systems in the form of PPBES, Planning, Programming, Budgeting, and Evaluation. Because demand for educational cost information has increased, a program budget system indicates what

resources are to be allocated in order to achieve predetermined goals.

BACKGROUND OF PPBS

In the early 1960's Robert S. McNamara, as Secretary of the U.S. Department of Defense was under pressure to justify the cost of the defense budget on a cost-output basis. McNamara's other concern was long-range planning. Tc obtain the requested funds and justify its programs, the Air Force Systems Command in cooperation with Rand Corporation, established a technique for support system cost analysis. The cost-benefit analysis system was able to prove and justify program needs resulting a favorable legislative budgetary allocation. The cost-benefit analysis system was adopted by the entire Department of Defense by 1964.

In 1965 President Lyndon B. Johnson mandated the adoption of this system which emphasized planning, programming and budgeting by every federal agency. With the support of the President, PPBS was adopted at all levels of the government. The goal was to permit government executives to find the most effective and least costly alternatives to achieve their objectives. At the news conference of August 25th, 1965, President Johnson announced the introduction of PPBS in the federal system stating the goals to be that:

> Under this new system each Cabinet and agency head will set up a very special staff of experts who, using the most modern methods of program analysis, will define the goals of their department for the coming year. And once the goals are established this system will permit us to find the most effective and the least costly alternative to achieving American goals. This program is designed to achieve three major objectives: it will help us find new ways to do jobs faster, to do jobs better, and to do jobs less expensively. It will insure a much sounder judgment through more accurate information, pinpointing those things that we ought to do less. It will make our decision making process as up-to-date, I think, as our space programs.

Since the time PPBS was adopted by the federal government, the concept has been implemented by state and local governments, profit and non-profit organizations and state educational institutions in New York, California, Florida, New Jersey, Illinois and Pennsylvania.

The philosophy of the systems approach to management planning and budgeting whether they are called PPBES, Systems Analysis, Operations Research, Management Information, Cost-Benefit Analysis, Simulation Models, and Cost Estimation Models, have a common objective, the improvement of the decision making process through the application of critical analysis and the scientific method.

FUNDAMENTAL PRINCIPLES OF PPBS

One may ask what makes PPBS applicable to governmental, indus-

trial and educational institutions. The universality of the system is based upon its goal to make rational decisions about allocating resources. In other words, PPBS is a methodology for improving decisions by allocation of scarce resources to attain maximum institutional benefits. The concept of efficient use of resources is of primary importance in a PPBS because it will result in the highest benefit from resources allocated in the institution. The traditional line item budget does not divide cost among functions, but rather for each purpose and does not provide for long-range planning of program expenditures. A program budget requires clearly stated objectives to accomplish prescribed goals.

A systems approach to educational administration can be defined as a way of thinking about the integration of many facets of decision making. The system approach consists of three interrelated concepts: 1) input, the resources available to reach a goal, 2) process, the composition of inputs, and 3) output, the product or outcome desired. The systems approach of PPBS has a potential to integrate the process of planning, programming and budgeting. The program budget permits the development and analysis of alternatives to achieve stated objectives with multi-year planning.

There are many definitions of PPBS. One which describes the

system best is that it is designed for long-range planning and budgeting, and establishes institutional programs as the central factor in budgeting, rather than the organizational unit, as in the traditional line-item budget system. PPBS also attempts to establish and clarify relationships between goals and objectives and evaluate results of programs and the activities obtained from these goals. The system provides for an analysis of economic impact of proposed programs expressed in costs to the institution. PPBS contributes to the decision making process by providing analysis of alternative programs in terms of anticipated costs and expected benefits. Finally it provides for an evaluation of programs to determine if goals and objectives have been realized. By cutting across conventional departmental lines, programs can be considered in terms of cost effectiveness and cost benefit relationship. Therefore, a program budget can be measured by its effectiveness to the extent to which the program has accomplished its objectives and the value derived from such a program. By establishing a relationship between outputs and inputs on the program level, it is possible to determine a productivity ratio. In education a measure of productivity may be the number of students completing a course or graduating from the institution. Cleveland and King define PPBS as "a package of interdependent activities oriented toward a common objective. Thus in PPBS, planning is done in terms of input-oriented resource requirements."[1]

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1. David I. Cleland and William R. King, "Project Management in School Administration", Educational Technology, February 1972, p. 72.

Goals of Planning, Programming and Budgeting consist of the following:

1. The specification of college-wide objectives.
2. The measurement of total systems cost.
3. The multi-year academic and administrative program planning.
4. The evaluation of alternative program designs.
5. The integration of policy and program decisions with the budgeting process.
6. The evaluation of program outputs as it relates to the objectives.

Any PPB System has three basic concepts:

1. An analytic capability which carries out continuing in-depth analysis of the college's objectives and its various programs to meet these objectives.
2. A multi-year planning and programming process which incorporates and uses a computer based management information system to present data in meaningful form for management decision making.
3. A budgeting process which can take program decisions and translate them into a financial plan in a budget form.

Many administrators and faculty members question the rationale for implementing PPBS and desire to know why PPBS is better

than the traditional line-item budget. There are several factors which give PPBS an advantage over the traditional line-item budget process.

The traditional concepts have a weakness because:

1. Program reviews are concentrated within a short period of time.
2. Objectives of the college's programs and activities are not specified with clear and concise statements.
3. Accomplishments are not specified concretely.
4. Alternatives are not sufficiently presented for management decisions.
5. Future cost analysis of present decisions are provided for.

From the humanistic point of view, PPBS enables the institution to establish a participatory management system because it requires the input of decisions from the lowest level in the organizational structure. Lessinger points out that accountability in higher education can be attained in a humanistic manner utilizing PPBS and (MBO), Management by Objectives, as tools of management. By combining PPBS and MBO, accountability can be achieved not only in college administration, but also in the classroom.

With this system the ideal situation may arise because a possibility

exists of merging technology (computers) with a humanistic system of decision making. A cybernetic situation may eventually result in combining the technological accuracy and speed of the computer by proving factual data for human decision making. An accountability model with humanistic framework is viewed by Lessinger in the instructional area as a system seen as a collection of people, methods, and materials operating in time and space to achieve variable levels of learning. He points out three factors dealing with instructional system components of accountability:

1. The system is designed to accomplish objectives. The definition and derivation of objectives is a very critical aspect of fulfilling the demand for accountability. The derivation of objectives for documented personal need is an important tie between accountability and humanism.

2. There are several functions which must be carried out. These can be described as training, educative, and celebrative functions.

3. It is not necessary to stipulate a given or set order in which the system must work. With results as targets, the process may vary in substantial way.[2]

From the experience of many colleges and other institutions implementing PPBS, it is apparent that this tool of management can be used to attain some degree of human accountability whether the system be used in education, government or business. By permitting participation in management decision making especially by the lowest level of the organization, morale should increase because members of such an institution will be able to make a

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2. Leon M. Lessinger, "Toward a Humanistic Accountability" Impact, Volume 2, Number 3, July 1973, p.6.

personal contribution to the attainment of overall institutional objectives.

PPBS and Its Applicability to the Florida State Community College System.

The Florida Legislature in 1969 passed a Reorganization Act resulting in a major impact on the future management of community colleges. Florida Statute 229.551 provides that the Department of Education and all state agencies adopt a system of long-range planning and programming. A six-year plan is to be used and updated and evaluated annually. PPBS was selected as a tool for implementing long range planning in Florida because it places an emphasis on all educational functions and activities, and sharing common objectives. The program categories can be combined under the same functions with common objectives dedicated to the achievement of defined goals regardless of organizational structures or departmental relationships. The Florida concept of PPBS consists of a system in which needs are identified, objectives are determined, priorities are established, and resources are utilized to achieve a coherent, comprehensive, and unified plan of action for all levels in higher education. The system is envisioned as a means to achieve objectives, analyze alternatives, allocate resources over a specified period of time and compare costs and effectiveness of all college programs.

It was realized by the state legislators that the traditional approach to planning and budgeting did not provide for accountability to satisfy public demands for justification of expenditures in higher education. The present plans are to have PPBS implemented for the 1975-76 academic year. When the system is fully implemented, it will provide the twenty-eight community colleges with a common approach to preparing their program budget and comparing program costs. The Florida program budget model will reflect direct costs from all disciplines and academic support areas directed toward the student semester credit hour and contact hour as outputs of each program.

To comply with the state mandate, the Division of Community Colleges in the Department of Education has developed a Manual for Planning, Programming, and Budgeting System for Florida's Community Colleges and appointed Dr. William Odom to direct the state-wide community college implementation of the system.

In response to that mandate, three community colleges, Florida Junior College at Jacksonville, Tallahassee Community College and Miami-Dade Junior College, were selected as pilot centers and began to make an effort to implement PPBS. Their present progress towards meeting the 1975-76 deadline varies and depends upon the resources allocated toward this purpose. The commitment to implement PPBS on each campus also varies with the number of

people involved with implementation. One campus has a number of individuals with full-time responsibilities for PPBS implementation and other colleges are limited to a part-time effort or none at all.

The responsibility of the state-wide implementation of PPBS for the community colleges rests with the Division of Community Colleges. The plan for implementation envisions the Division as a coordinating agency. This role will include the provision for special expertise for the colleges, which the colleges individually can not afford. The Division staff members will also function as consultants to the colleges in PPBS implementation. The Division will serve as a liaison with other state agencies and the legislature on behalf of the community colleges, especially concerning funding, state laws and regulations and interpretation of statewide educational objectives.

A partnership between the Division of Community Colleges and twenty-eight campuses is envisioned to implement PPBS in the following manner:

A. Each College will develop a comprehensive short and long-range plan which shows how it intends to carry out its educational and support programs.

B. The plan will include estimates of the resources needed by

the college.

C. The plan will include alternative courses of action assuming the occurrence of certain conditions! Shortages of funds and/or a decrease in demand for college services.

D. The plan will include explicit directions for evaluating the achievement of objectives.

E. A summary of the plan will be submitted to the Division of Community Colleges.

F. The twenty-eight college plans will be used to develop a comprehensive long-range plan for the system of colleges. They will also be used as the basis for requesting state support and allocating funds to the colleges.

THE FUTURE ROLE OF PPBS IN THE FLORIDA COMMUNITY COLLEGE SYSTEM

Planning, Programming, Budgeting as a system will play a very important role in allocating resources at all community colleges, but not by 1975 as presently planned. It may be more realistic to predict that a totally implemented system may be in existance by 1980. There are several reasons for this pessimistic projection. One major factor is that at the present time not enough effort and commitment are being applied at each community college to meet the planned deadline for implementation. A relatively small number of community colleges will be able to allocate

enough time, funds and personnel to accomplish this undertaking. The other factor is that there are not enough fully trained staff members on each campus who are capable of motivating student, faculty and administration as well as the local community to accomplish this task.

The goal for the implementation of PPBS for the 1975-76 academic year is a noble one, however only a token number of colleges will meet this deadline. At least half of the colleges lack a good data base to provide factual information for long-range planning. PPBS requires that a good management information system be available for this purpose. Very few community colleges have a computer based management information system capable of supplying program costs based upon PPBS data element requirements. Those institutions which have developed some applications on the computer will have to revise their programs to meet the PPBS model.

Experts in the field of PPBS point out that there are two ways of implementing a PPB System. One plan takes on evolutionary approach, the other a turn-key approach which requires an immediate change in organizations and procedures. The approach selected by the Division of Community Colleges is the evolutionary one. The evolutionary approach, a soft-sell type, requires the parallel use of the present budgeting system along with the program budget concept for a period of years until PPBS is phased in completely.

All community colleges are now aware that they must undertake the implementation of PPBS on their campuses, however a mandate has been issued by the Department of Education or the Division of Community Colleges directing each campus president to allocate resources and start implementing the system. During the last year a manual for implementation has been developed, the manual field tested, and regional as well as state-wide implementation seminars conducted by Dr. William Odom in his monumental task. However, no word has officially reached each campus ordering PPBS's implementation. As a result many campus personnel are not at all concerned with the importance of the system and its potential as a tool for better management and long-range planning. Several knowledgeable individuals believe that valuable time is being wasted because of the non-directiveness of the Dapartment of Education the 1975 deadline may never be met. Only a few enlightened college administrators have taken the hint that PPBS will be eventually mandatory for each community college in Florida and have started to orientate all college personnel and prepare for implementation, but these administrators are in the minority.

Recently a state-wide meeting of all PPBS coordinators was held to determine what progress has been made to implement the system on each campus. Participants expressed a wide range of opinions regarding their progress and their role in implementing PPBS

on each campus. The predominant factor was a general agreement that they were not making enough progress. Those participants that have made some headway experience difficulty and expressed the following concerns:

1. Resources were not available, particularly people to implement the planning system.
2. There is a lack of commitment from top college administrators to develop and implement the system.
3. There is a lack of adequate time to develop a good planning system.
4. There is a lack of understanding of what the planning system should accomplish for the college, how it will work, and who would be involved in it, and how.
5. Computer and personnel capability may not be adequate.
6. Good systems planning is not taking place at the colleges.
7. There is a lack of understanding of the potential value of a formal planning process. There seems to be no apparent benefits in implementing a formal programming and budgeting system.
8. There is a feeling that the PPB System is just another State required report which colleges must complete.
9. There is fear of increased visibility of college operations and the fear of misuse of information at the State level.
10. There is a lack of commitment to the system by Division administrators.
11. There is a lack of expertise available at some colleges.
12. There is a lack of compatability between the state-wide community college program classification structure and the various organizational structures at twenty-eight colleges.
13. There are 28 different policies, procedures, programs, personalities, communities and politics. How can they all be integrated in one system and be measured with the same

evaluative technique?

14. There is a fear that the planning system will be developed by middle management personnel and not used at all by top management in their decision making role.

Hence, it seems that implementation of PPBS in its pure philosophical conceptual framework to attain some degree of accountability is a long way off. Those individuals who are responsible on a daily basis for the systems implementation are facing an enormous task.

Conclusion

The Planning, Programming, Budgeting and Evaluation System holds a great promise for the community colleges in Florida. In order to comply to the mandate established by the legislature, educators have an opportunity to conduct long-range planning and determine the effectiveness and efficiency of their administration and instruction. In order that the objective be met, a clear two-way communication system must exist. The Department of Education must be more definite about what it wants each campus to accomplish by providing specific goals and objectives for the community colleges to follow. There are many academic administrators in the Florida community college system who are very anxious to begin this task.

In connection with the most immediate problem, there are several

recommendations which can be made at the present time.

1. An immediate directive should be issued by the Department of Education, Division of Community Colleges to all presidents directing them to implement PPBS by 1975.

2. Each campus must allocate enough funds and personnel to facilitate the implementation of the system.

3. Each campus must begin training its personnel in PPBS techniques and its philosophy.

4. A more coordinated effort must be made between all community colleges to undertake sharing of experiences in implementation, computer programs and data bases.

5. Each president must make a personal commitment to the implementation of the system and lead his college in its development.

In addition to the problem of governance, the next most serious problem which now as never before confronts us in this state is accountability. Hodgkinson states that, "The concept of accountability will be meaningless until we have some agreement on each campus as to how it should be assessed and who should participate in the assessment". The Florida Dapartment of Education in 1969 realized that a need existed to attain some degree of accountability. Recently, the Department of Community Colleges has decided that in order to attain a meaningful basis for accountability, the Planning, Programming, Budgeting and Evaluation Systems model (PPBES) will be adopted so that some degree of agreement, communication and evaluation of administrative and instructional programs can be realized.

Having had an opportunity to study the proposed system of

accountability, I feel optimistic that it will not only accommodate the need for economy in college governance, but also recognize the human element in this process. The Florida plan for accountability via PPBES has considerable merit for attaining participatory college governance by every level of the college structure, from the bottom up to the top. It is envisioned as a participatory system in which every member of the college community will have some input in the way the college is governed. In addition, every individual will have an opportunity to evaluate the outcome of the institution and his/her contribution to the college.

In addition to the PPBES technique, we are seriously considering two more recent developments in the management field, namely, Administration By Objectives popularly known as MBO, (Management By Objectives) and Instruction By Objectives (IBO). These two techniques will enable each individual in the organization to know what is expected of him, defines his goals and objectives for a specific period of time and eventually, assist him to evaluate his progress in meeting these objectives. We hope that what will eventually result is a humanistic model of governance within the accountability framework. In the words of Leon Lessinger in his article, "Toward a Humanistic Accountability" we see a system "as a collection of people, methods, and materials operating in time and space to achieve variable levels of learning".

Many faculty and administrative officers faced with a mandate to implement PPBES have expressed their fears that central administration's major objective is to attain total control over the community colleges. This concern is also shared by me, however, nothing has been said or written or implied which gives reason for concern. I feel that the system will permit us to communicate and share our knowledge on program costs, provide a wide range of educational programs for our students and for the taxpayer, provide actual and factual financial information showing just how his money is being spent and for what. PPBES and accountability is nothing new. In the words of an unknown author "I present to you nothing new, just the same old stuff tied together with a new ribbon".

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